

OIB - HU-25C Guardian #524 09/13/16 Science Report

Aircraft:

[HU-25A Guardian #524](#) ([See full schedule](#))

Date:

Tuesday, September 13, 2016

Mission:

OIB

Mission Location:

Kangerlussuaq, Greenland

Mission Summary:

Mission: Falcon Jakobshavn-Eqip-Store (priority: low)

This mission is identical to the Jakobshavn-Eqip-Store flight conducted for the last several years and last flown in Fall 2015, but with the centerlines of Store, Eqip Sermia, Kangilerngata Sermia, Sermeq Kujalleq, Rink, and Kagerdlugssup Glaciers removed.

Today's weather was dominated by a strong storm system located just west of Cape Farewell and moving slowly east, and also by remnant moisture over the eastern and central ice cap associated with another, and frustratingly persistent, storm system in the Greenland Sea. The moisture and upsloping winds from the east created low stratus and fog all over the central ice cap. The southern storm system threw bands of cirrus clouds across all of southern Greenland. We chose this low-priority flight because it was the most important flight we had left which stayed west of the stratus and fog. The cirrus clouds turned out to lie between 25,000' and 30,000' altitude, right across our operating altitude of 28,000', so we requested and were granted permission from controllers to descend to 23,000' to stay below most of it. Despite these difficulties, we estimate successful data collection across 98% of the mission.

All instruments performed well.

We conducted a ramp pass at 14,000'.

Data volumes:

CAMBOT: 11 Gb images

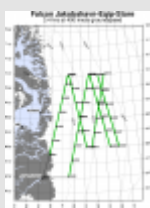
Narrow Swath ATM: 37 Gb

FLIR: 7.7 Gb

total data collection time: 3.7 hrs

Images:

Map of Falcon - Jakobshavn-Eqip-Store



[Read more](#)

Melt Pond



[Read more](#)

High and low clouds



[Read more](#)

Infrared satellite weather image



[Read more](#)

Submitted by:

John Sonntag on 10/01/16

Related Flight Report:

HU-25A Guardian #524 09/13/16

Flight Number:

OIB 2016 on HU-25 #32

Payload Configuration:

ATM

Nav Data Collected:

No

Total Flight Time:

4 hours

Submitted by:

Richard Yasky on 09/30/16

Flight Segments:

From:	BGSF	To:	BGSF
Start:	09/13/16 10:23 Z	Finish:	09/13/16 14:22 Z
Flight Time:	4 hours		
Log Number:	16F003	PI:	Nathan Kurtz
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryosphere & International Polar Year		
Purpose of Flight:	Science		
Comments:	Falcon Jakobshavn-Eqip-Store mission flown initially at FL270 with descents to FL250 and finally FL230 as high cirrus impacted the flight tracks intermittently. Worst data collection area was in the central section of the lines with dense low stratus to the east of the tracks. Completed ramp pass at 14000 feet before full stop landing.		

Flight Hour Summary:

	16F003
Flight Hours Approved in SOFRS	121.25
Total Used	126.9
Total Remaining	-5.65

16F003 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
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06/29/16	OIB 2016 on HU25A ICF	Science	2	2	119.25
07/11/16	OIB 2016 on HU25A #1	Ferry	2.6	4.6	116.65
07/11/16	OIB 2016 on HU25A #2	Ferry	2.5	7.1	114.15
07/11/16 - 07/12/16	OIB 2016 on HU25A #3	Ferry	2.2	9.3	111.95
07/12/16 - 07/13/16	OIB 2016 on HU25A #4	Ferry	2.6	11.9	109.35
07/13/16	OIB 2016 on HU25A #5	Science	3.4	15.3	105.95
07/14/16	OIB 2016 on HU25A #6	Science	3.5	18.8	102.45
07/15/16	OIB 2016 on HU25A #7	Science	3.7	22.5	98.75
07/19/16 - 07/20/16	OIB 2016 on HU25A #8	Science	3.6	26.1	95.15
07/20/16	OIB 2016 on HU25A #9	Science	3.4	29.5	91.75
07/21/16	OIB 2016 on HU25A #10	Science	3.6	33.1	88.15
07/22/16	OIB 2016 on HU25A #11	Ferry	3.9	37	84.25
07/22/16	OIB 2016 on HU25A #12	Ferry	3.2	40.2	81.05
07/22/16	OIB 2016 on HU25A #13	Ferry	2.1	42.3	78.95
08/23/16	OIB 2016 on HU-25 #14	Science	2.3	44.6	76.65
08/25/16	OIB 2016 on HU-25 #15	Ferry	3.2	47.8	73.45
08/25/16	OIB 2016 on HU-25 #16	Ferry	2.2	50	71.25
08/27/16	OIB 2016 on HU-25 #17	Science	3.7	53.7	67.55
08/29/16	OIB 2016 on HU-25 #18	Science	3.8	57.5	63.75
08/29/16	OIB 2016 on HU-25 #19	Science	3.5	61	60.25
09/01/16	OIB 2016 on HU-25 #20	Science	3.4	64.4	56.85
09/02/16	OIB 2016 on HU-25 #21	Science	3.8	68.2	53.05
09/02/16	OIB 2016 on HU-25 #22	Science	3.8	72	49.25
09/05/16	OIB 2016 on HU-25 #23	Science	0.6	72.6	48.65
09/06/16	OIB 2016 on HU-25 #24	Science	3.5	76.1	45.15
09/09/16	OIB 2016 on HU-25 #25	Science	3.5	79.6	41.65
09/09/16	OIB 2016 on HU-25 #26	Science	3.5	83.1	38.15
09/10/16	OIB 2016 on HU-25 #27	Science	3	86.1	35.15
09/11/16	OIB 2016 on HU-25 #28	Science	3.9	90	31.25

09/11/16	OIB 2016 on HU-25 #29	Science	3.7	93.7	27.55
09/12/16	OIB 2016 on HU-25 #30	Science	3.3	97	24.25
09/12/16	OIB 2016 on HU-25 #31	Science	2.7	99.7	21.55
09/13/16	OIB 2016 on HU-25 #32	Science	4	103.7	17.55
09/13/16	OIB 2016 on HU-25 #33	Science	2.9	106.6	14.65
09/15/16	OIB 2016 on HU-25 #34	Science	3.7	110.3	10.95
09/16/16	OIB 2016 on HU-25 #35	Ferry	2.4	112.7	8.55
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	114.4	6.85
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	116.1	5.15
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.8	118.9	2.35
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.9	121.8	-0.55
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.5	124.3	-3.05
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.6	126.9	-5.65

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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Page Editor: Erin Justice

NASA Official: Bruce A.

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